Part 6 Project Report

1. Name: YangKuan Du

2. Description: A Rental Housing System website that customers can browse the housing information published in the website, and also can publish housing information.

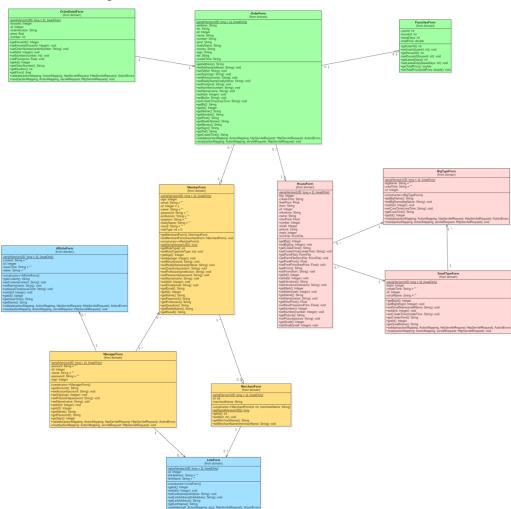3. List the features that were implemented (table with ID and title).

ID	Description	Priority
1	Customers can sign up	3
2	Customers can bowse the rental listings	2
3	Customers can browse the latest release of housing information	1
4	Customers can browse the information of preferential rent	3
5	Customers can view their orders	3
6	Customers can view the details of the housing information	2
7	Customers can add their favorite rental information to their favorites	3
8	Customers can view favorites	2
9	Customers can choose how long they want to rent	2
10	Customers can choose to continue browsing or go to checkout	3
11	Customers can view the site's announcement messages	1
12	Manager can query by type of housing source	2
13	Manager can delete their own published property	1
14	Manager can view the listing details	2
15	Manager can choose to set the property as a discount	2
16	Manager can change the price of participating in discount listings	2
17	Manager can add housing information	3
18	Manager can add and delete membership information	1
19	Manager can add and remove background administrators	2
20	Manager can change passwords in the background	1
21	Manager can view all orders	3
22	Manager can modify queries and delete all orders	2
23	Manager can add relevant site information	1
24	Manager can choose to exit the background system	1

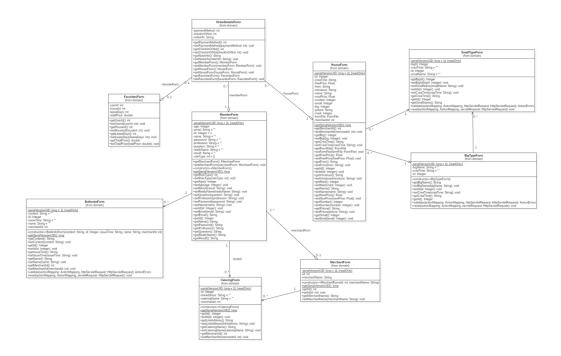4. List the features were not implemented from Part 2 (table with ID and title)

ID	Description	Priority
1	Customers can become admin when they publish housing information	2
2	Customers can get the quality information recommended by the system	1
3	Manager can see the latest half-year housing rental statistics	1

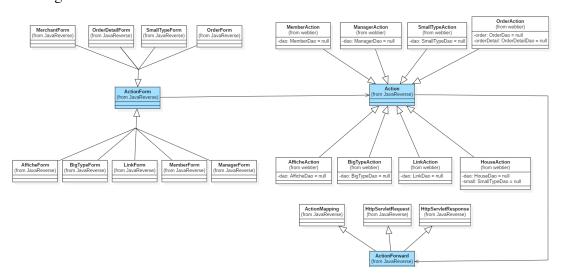| 4	Customer can evaluate the order and the feelings about the environment, sound insulation and service of the house	2
5	Customer can communicate with the landlord online	1
6	Customers can choose whether to register as a member of a merchant	2
7	Customers are able to cancel orders and be able to make refunds	2

5.Final Class diagram

Class Diagram for part 2:

Actually I do not make too much change for these two diagrams. It is very efficient to set up the design first. While we are implementing the functionality of the project. Setting up the design pattern and class diagram would make easier to understand the logic of the project and it could be easy to follow the steps to do it. It would improve the quality of the project. It could definitely save a lot of time. The front design could allow developers easily check the requirement of the project. If there is something missing. It could be possible and quickly fixing the missing part. It will be definitely helpful for my project development

6. Design Pattern: MVC

How to achieve:

Based on Struts framework, this project realizes the functional system of house rental with MVC mode.It forces the application to be divided into three layers: Model, View and Controller;The specific implementation of the three-layer structure is as follows:

1) Model: encapsulates all the internal logic and rules.Entitybeans are usually implemented by javabeans or EJB entitybeans.The project builds the ActionForm entity classes which inherit struts: MemberForm, MerchantForm, OrderForm, HouseForm, BigTypeForm, SmallTypeForm, OrderDetailForm and so on.

2) View: use the business logic to process the results and build the response presented to the client.It is usually implemented by JSP and Struts TagLib.This project adopts the form of JSP to receive background data and present it to customers as a bridge between the front-end page and the background.

3) Controller: manages and controls all user and application interactions.Struts is usually implemented by ActionServlet, Action.Through inheritance of struts Action classes, this paper builds MemberAction, OrderAction, HouseAction, BigTypeAction, LinkAction, ManagerAction etc as control layer is used to receive the user's request and to transfer all of the input to the practical work of the Model.Finally, the JSP is called to return the output.

Why I choose MVC:

Adopting MVC pattern not only greatly improves flexibility, but also makes the program more conducive to development, extension and maintenance. Meanwhile, MVC includes three basic parts -- Model, View and Controller, which work together with minimal coupling to increase the extensibility and maintainability of the program can have multiple views corresponding to one model, which can reduce the duplication of code and maintenance of code. Once the model changes, it is also easy to maintain. The data returned by MVC model is separated from the display logic. Different layers perform their respective duties, and components of each layer have the same characteristics, which is conducive to the generation of management program code through engineering and instrumentalities.

7. What have you learned about the process of analysis and design now that you have stepped through the process to create, design and implement a system?

One of the most important lessons could be the importance of design pattern. For this big project. A design pattern will help us build up the logic of the project, how the project will be moving forward, and how we can implement the code with different classes. Without this, it will be very difficult to write code and accomplish the main purpose of the website. MVC is actually a very good design pattern since for this project. It allows me to display the information from the database in different ways. Once I have done my project, I could check whether I have something missing or something finished

efficient to implement the project. Also the design pattern could allow us to improve the objected-oriented design and performance by incorporate it into my project